WESTMINSTER

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Dear Ms. Foss:

Thank you for the opportunity to review and provide comments for the Building 371/374 Decommissioning Operations Plan. The 707, 776/777 and 771 DOP's that you prepared prior to this document, contained a great deal of information and were the most well prepared documents that I have reviewed to date. However, the 371/374 DOP is notable for its lack of information. It is understandable that it is difficult to be specific in this document since the demolition of this building is five or six years away. But as you know, this document provides the only opportunity for the community to comment on the decommissioning, decontamination and deconstruction of the 371 facility. A modification to this document should be considered in 2003 or 2004 that incorporates lessons learned from taking down buildings 776/777, 707, and 771.

Because of the challenges that Kaiser-Hill faces in removing the "hot" CSV and I/O stations that contain inert air, it would seem that the five to six year time frame provides an excellent opportunity for Kaiser-Hill to look for new technologies that could be used for the deconstruction of this area. There is a high potential for the release of airborne contamination if explosives are used in this area. Building 371 is a Type 3 facility as you note. It may be cheaper to use dynamite to take this building down, but worker and offsite community protection should be the first consideration.

The DOP doesn't mention the fact that most of the Site buildings that will provide back up for the decontamination and deconstruction of this facility will be removed. The Mobilization Section of the DOP discusses using portable toilets, providing shower facilities and hand wash units but doesn't discuss the infrastructure that will be left on the site to support the removal of building 371. At what point in time will the water and wastewater treatment facilities be removed? It would seem that if a document is prepared five years before it is needed that there should be discussion in the document of the support services that will be needed and how they will be provided.

Comments:
Page 17 4.0 Project approach. During the course of the Building 371/374 Closure Project there may be instances where circumstances differ from those predicted. In such cases planned activities may be revised without revising the CPB.

Response: The Lead Regulatory Agency must review any major changes to the scope of the 371/374 Closure Project. This statement in the DOP provides an opportunity to make significant changes to the DOP without regulator and public opportunity to comment.

Page 16 states that "some radioactivity was detected on metal roofing which may be due to naturally occurring radioactive material such as radon decay products. This elevated activity will be investigated further through additional surveys and the collection of physical samples."

Comment:
Because radioactive material has been detected on metal roofing, speciation of the material becomes necessary. Is it plutonium, americium or uranium? It would not seem prudent to assume that the material on the roof is a radon decay product. There is no mention as to the radiation levels detected or how and when the roof will be decontaminated. This information should be contained in the DOP.

Page 21 4.2.4 Pre-Demolition Survey. The section indicates that the lead regulatory agency, at its discretion, will review the results from the independent verification of the characterization data.

Comment:
The lead regulatory agency should review the independent verification of the characterization data. As this is the last major plutonium facility to be taken down, and it is a Level 3 facility, there will be a push to meet the 2006 closure deadline. The public needs assurance that this building has indeed been properly decontaminated before being taken down.

Page 37 Section 4.4.2 Removal of the CSV and I/O Stations. During a recent tour of building 371 and the stacker retriever area, I noted that the area within the CSV is inerted with nitrogen. This indicates that the area is "hot". Page 38 of the DOP indicates that the CSV will be de-inerted and adapters will be installed to provide for insertion of a passive aerosol fog into the east and west sections of the CSV, the S/R transfer bay and maintenance bay will be fogged to encapsulate the contaminants on the interior surfaces of the vault and reduce the possibility for airborne contamination. Manned entry to the CSV will be accomplished in powered air purifying respirators. A durable fixative coating will be applied to the floor area to encapsulate remaining contaminants. The ability to "re-fog" the room will be maintained during the rack removal and initial decontamination operations. The paragraph ends stating that the CSV will be re-fogged

Comment:
This area is highly contaminated with plutonium oxides necessitating the need for workers to use air-purifying respirators. Insertion of adapters in order to insert an aerosol fog is vague. This section needs to be more explicit. There is a lot of fogging going on and I am not sure that workers will be properly protected. Please provide detailed information on the type of fog that will be used. Also, Kaiser-Hill needs to look at new technologies for cleaning up this area. The risks to workers and the possibility for contamination to become airborne within the 371 facility are high. This item should be place on a list of technology needs and provided to the Department of Energy for immediate attention. Perhaps by 2005 some type of new technology will be available that could be used in lieu of multiple fogging.

Page 40, second paragraph last sentence indicates that floors or walls with deep contamination will be identified (as to depth of contaminants) and concrete will be removed during the decontamination process or the areas will be sealed and removed prior to demolition of structure.

Page 40 Section 4.4.3.1 Incinerator Scrubber Canyon: The second paragraph, line four, states "the residual liquids and caustic crystals were cleaned up in the early 1990's and a painted coating was applied to seal the floor from future leaks. Most of this waste will be low level waste."

Comment:
Assuming that this area will be low level waste based on the fact that the area was cleaned up in 1990 and sealed may not be realistic. Caustic materials have the ability to eat through concrete in a very short period of time. There could be significant contamination under the seal and therefore the City recommends that the section be rewritten to include a statement that the floor will be sampled in order to properly characterize the remaining contamination beneath the seal.

Pages 40-41, Section 4.4.3.2 Precipitation/Calcination Canyon. The section indicates "the precipitation process proceeded through a "hot start-up", during which numerous batches of nominal 100 gram per liter plutonium nitrate per 1 molar nitric acid slurries were dumped to the canyon floor. After testing was discontinued the floor was left pitted and paint peeled in places. Some localized area gram-levels of contamination may exist; however, due to the limited period of use, it is anticipated that excessive widespread penetration of contamination into concrete is unlikely."

Comment:
As stated above, it is not safe to assume that because the canyon had limited use that there is not widespread penetration of contamination. The concrete needs to be sampled to ensure that this is not the case. Please modify this section to state that the canyon floor will be properly sampled and characterized.

Page 41, Section 4.4.3.4 Reduction Canyon. The last sentence in this paragraph notes that Glovebox 32 is currently being used to process residues, which may contribute an additional source of contamination to the reduction canyon.

Comment:
This statement goes back to my original comments that this DOP, which I understand is needed in order to provide decommissioning activities, is premature. This DOP needs to be re-issued as a modification in approximately 2003 when all the residues are processed in order to capture the additional contamination and decontamination that may be necessary after the building mission is complete.

Page 42, Section 4.4.3.8 Americium Processing Area. The paragraph states that "the equipment in the tank vault and ion exchange canyons was stripped out and the rooms converted to secured storage vaults to support residue and International Atomic Energy Agency (IAEA) monitored material storage. The valve maintenance areas and pump gloveboxes remain as installed and are reported to have become contaminated during ventilation reversals."

Comment:
The document does not mention at what point in time the IAEA monitored material storage will be removed from building 371. The section should contain a statement that after all the IAEA materials are removed the valve maintenance areas and pump gloveboxes will be decontaminated and/or sized reduced. This section needs more detail.

Page 45, section 4.5 Facility Demolition. The paragraph states that "the information contained in this section is based on the current planning basis. The actual sequence and selected methods may differ from what is indicated in this section. As long as the activity remains within the scope of the RSOP for Facility Disposition this DOP will not be modified. Actual demolition will not proceed until the lead regulatory agency has concurred with the PDSE and stakeholders have been notified of the demolition schedule and techniques to be used to demolish the facility."

Comment:
Any major changes to the DOP should be addressed with a modification. Approval of this "bare bones" DOP does not provide concurrence with what may happen to building 371 during the next five years and what may need to be accomplished in order to safely D&D this facility.

Page 46. It is noted on this page that during demolition, airborne dust will be monitored on a visual presence or absence criterion, with dust control water spray being applied as required from a fire hose equipped with a fog nozzle.

Comment:
During demolition, airborne dust will occur. Dust control water spray should be applied during these activities not only to protect against resuspension as much as possible, but also to protect the workers and others who may be onsite at that point in time. Please rewrite this statement to note that it is acknowledged that dust will occur and dust control water spray will be used.

Page 46, bullet eight indicates that there will be placement of an engineered backfill of the Building 371 footprint.

Comment:
The City of Westminster does not support leaving building foundations in place.

Please review Westminster City Council Resolution 13, Series 98, that has been attached to several comment documents.

Page 53, third paragraph. This paragraph indicates that "the planned approach for demolition of the main portion of building 371 includes the use of explosives. The use of explosives will be enhanced by the beneficial effect of gravity, eliminating the need to move large quantities of soil away from the building walls. The roof structure and exterior walls will likely not require any explosive actions to initiate collapse relying solely on gravity to bring them down into the sub-basement void. This will provide a protective shell that will contain any projectiles issued from the interior blasts.

Comment:
Using explosives on the main portion of building 371 must be approved by the lead regulatory agency. Bringing the roof structure into the sub-basement does not meet the definition of building concrete rubble. Will the roof structure be removed? This action seems to circumvent the intent of the rubble RSOP which is to rubblize the concrete to a size that allows all empty spaces to be filled in the building excavation area that is left after the foundation is removed.

Paragraph 5 page 53: The paragraph indicates that the use of explosives will be evaluated for its cost-effectiveness as compared to mechanical demolition techniques.

Comment:
Previous DOP's have indicated that the use of explosives is necessary in order to ensure the safety of workers due to the age of facilities and also because of the robustness of some of the inner walls of the facilities. This DOP indicates that the major consideration is now cost effectiveness. If using mechanical demolition techniques can be used to take a building down safely with minimal risk to workers, even if it takes a little more time, then it is the preferred alternative. Using explosives on Level 3 facilities still poses the risks of contamination becoming airborne and blowing into the downwind communities or re-contaminating what has already been cleaned up inside the facility. No matter how much effort is expended in cleaning up a highly contaminated facility some contamination will remain in the structure.

Page 54 item 5. This item states "it is anticipated the rubble pile will be fairly flat and uniform and free of large voids from an implosion of the building. The pile will be left as it is with the backfilling operation proceeding directly over it. Voids created by large pieces of concrete structure leaning against an adjacent wall or support column stub will be eliminated using a wrecking ball. Exterior basement walls will be left in tact.

Comment:
This is unacceptable. Voids will be left in the concrete where surface water can percolate into the subsurface and cause any remaining contamination (may be hazardous as well as radionuclide) to move into the groundwater which eventually surfaces as seeps and moves to surface water. Also, by not having properly sized fill material an opportunity is left for burrowing animals to move into the area and establish a community.

Page 54 item 6. "An opening in the basement wall will be made after the building is down and a bulldozer may be driven out onto the center of the collapsed building structure to manipulate the surface into a more reasonably uniform flat surface (if necessary). Three inch minus concrete backfill material created from the recycle of demolition debris will be used to fill remaining visible voids and air spaces and to create a flat backfill operation to conform with subsistence requirements in the RSOP for Recycling Concrete.

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Comment:
Unless the concrete is rubbleized, there is no way of assuring that the remaining voids below what is visible are filled in. There will be ongoing subsidence in this area and a pathway for groundwater movement. This is unacceptable. The Concrete rubble RSOP is specific in its language as to what constitutes appropriate concrete fill.

Thank you for the opportunity to once again provide comments on the important decommissioning operation plans for facilities within the Rocky Flats Protected Area.

I look forward to receiving your response to the issues outlined in this letter.

Sincerely,

Mary Harlow

Mary Harlow
Rocky Flats Coordinator

Enc.

cc: David Abelson, Rocky Flats Coalition of Local Governments

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